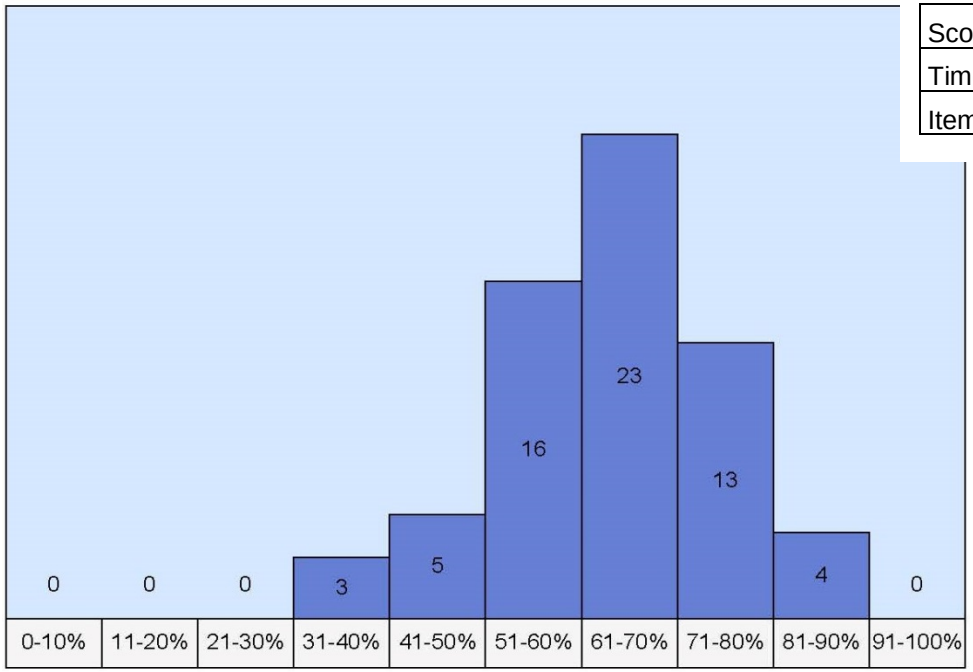
# 2013-14 State Results

## AG MET Equipment Fabrication Systems

64 Participants




| | Min | Max | Mean |
|---|---|---|---|
| Score | 35 | 84 | 62.97 |
| Time | 00:13:21 | 01:00:00 | 00:31:50 |
| Items Answered | 97 | 100 | 99.84 |

**Average Score: 63.0**
**Cut Score: 68**
**Pass Percentage: 32.8%**

Assessment: AG MET Equipment Fabrication Systems
Accumulated Results

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| 1) CONTENT STANDARD 1.0 : DEMONSTRATE GENERAL SHOP SAFETY PROCEDURES | 91.67% |
| 1) PERFORMANCE STANDARD 1.1: UNDERSTAND PERSONAL AND GROUP SAFETY | 91.67% |
| 1) 1.1.1 Demonstrate personal safety precautions in an agricultural mechanics environment | 93.75% |
| 2) 1.1.2 Describe group safety precautions in an agricultural mechanics environment, including lock out/tag out procedures | 82.81% |
| 3) 1.1.3 Identify safe and unsafe working conditions in the agricultural mechanics environment | 89.06% |
| 7) 1.1.7 Demonstrate appropriate fire extinguisher use | 96.88% |
| 2) CONTENT STANDARD 2.0 : DEMONSTRATE SAFE AND PROPER WELDING PROCEDURES | 59.94% |
| 2) PERFORMANCE STANDARD 2.1: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN OXY/FUEL CUTTING (OFC) | 71.48% |
| 1) 2.1.1 Demonstrate proper safety practices while operating all welding and cutting equipment | 79.69% |
| 3) 2.1.3 Properly assemble oxy/fuel apparatus | 76.25% |
| 5) 2.1.5 Properly cut mild steel to specification | 31.25% |
| 3) PERFORMANCE STANDARD 2.2: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN SHIELDED METAL ARC WELDING (SMAW) | 71.88% |
| 1) 2.2.1 Demonstrate proper safety practices while operating SMAW equipment | 89.06% |
| 2) 2.2.2 Select appropriate electrodes for specific applications | 69.27% |
| 3) 2.2.3 Properly adjust SMAW apparatus | 68.75% |
| 5) 2.2.5 Produce three AWS standard welds in the flat and horizontal position | 70.54% |
| 6) 2.2.6 Identify welding electrodes using AWS electrode classification system | 54.69% |
| 7) 2.2.7 Determine the correct shade of lens used for a given application and type of welding process | 71.88% |
| 4) PERFORMANCE STANDARD 2.3: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN GAS METAL ARC WELDING (GMAW) | 47.5% |
| 2) 2.3.2 Select appropriate electrodes, contact tips, gas nozzles and diffusers, and shielding gas for specific applications | 56.25% |
| 3) 2.3.3 Properly adjust GMAW apparatus for specific application | 41.80% |
| 5) 2.3.5 Produce three AWS standard welds in the flat and horizontal position | 46.35% |
| 5) PERFORMANCE STANDARD 2.4: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN GAS TUNGSTEN ARC WELDING (GTAW) | 48.63% |
| 2) 2.4.2 Select appropriate consumables and shielding gas for specific applications | 36.46% |
| 3) 2.4.3 Properly adjust GTAW apparatus for specific application | 48.44% |
| 4) 2.4.4 Properly diagnose equipment failure | 48.44% |
| 5) 2.4.5 Produce three AWS standard welds in the flat and horizontal position on ferrous metals | 67.19% |
| 6) Performance Standard 2.5 : Demonstrate Safe and Proper Techniques in Plasma Cutting (PAC) Procedures | 39.96% |
| 1) 2.5.1 Demonstrate proper safety practices while operating plasma cutting equipment | 71.88% |
| 2) 2.5.2 Select appropriate consumables for specific applications | 38.28% |
| 3) 2.5.3 Properly assemble plasma cutting apparatus | 17.97% |
| 4) 2.5.4 Properly diagnose equipment failure | 64.06% |
| 5) 2.5.5 Properly cut ferrous metals | 31.25% |
| 3) CONTENT STANDARD 3.0: UNDERSTAND THE PRINCIPLES OF ELECTRICITY IN AGRICULTURE | 54.37% |
| 1) PERFORMANCE STANDARD 3.1: UNDERSTAND PRINCIPLES AND THEORIES OF ELECTRICITY | 49.61% |
| 1) 3.1.1 Describe proper safety practices applicable to agricultural electrification | 95.31% |
| 3) 3.1.3 Calculate voltage, current, and resistance using Ohmâs Law | 34.38% |

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| 2) PERFORMANCE STANDARD 3.2: APPLY THE PRINCIPLES AND THEORIES OF ELECTRICAL CIRCUITS | 73.44% |
| 3) 3.2.3 Explain the function and importance of grounding in electrical circuits | 73.44% |
| 4) CONTENT STANDARD 4.0: UNDERSTAND WATER AND WASTEWATER MANAGEMENT IN AGRICULTURAL AND INDUSTRIAL SETTINGS | 35.94% |
| 1) PERFORMANCE STANDARD 4.1: DEMONSTRATE SAFE PRACTICES AND PROCEDURES IN AGRICULTURAL AND INDUSTRIAL WATER MANAGEMENT | 35.94% |
| 1) 4.1.1 Explain the role of water use, management and conservation in the agricultural industry | 35.94% |
| 5) CONTENT STANDARD 5.0: UNDERSTAND PRINCIPLES AND APPLICATIONS IN AGRICULTURAL CONSTRUCTION | 79.69% |
| 1) PERFORMANCE STANDARD 5.1: DEMONSTRATE PRACTICES, APPLICATIONS AND PROCEDURES OF DRAFTING IN AGRICULTURAL PROJECTS | 80.47% |
| 1) 5.1.1 Differentiate between the various plans used in projects (blueprints, shop plans and wiring schematics) | 82.81% |
| 3) 5.1.3 Develop a bill of materials from a selected set of plans | 78.12% |
| 2) PERFORMANCE STANDARD 5.2: DEMONSTRATE PRACTICES AND PROCEDURES IN CONSTRUCTION OF AGRICULTURAL PROJECTS | 78.13% |
| 1) 5.2.1 Explain safety procedures required while working on a project site, including personal safety, hand and power tools and equipment | 78.12% |
| 6) CONTENT STANDARD 6.0: UNDERSTAND PRINCIPLES AND APPLICATIONS OF SINGLE AND MULTIPLE CYLINDER ENGINES | 74.38% |
| 2) PERFORMANCE STANDARD 6.2: DEMONSTRATE A WORKING KNOWLEDGE OF THE ESSENTIAL ENGINE OPERATING SYSTEMS | 74.38% |
| 2) 6.2.2 Explain functions of ignition, fuel, cooling, lubrication and compression systems and their interrelationships | 74.38% |
| 7) CONTENT STANDARD 7.0: DEMONSTRATE BASIC SKILLS IN OPERATION, MAINTENANCE AND REPAIR OF AGRICULTURAL MACHINERY | 72.50% |
| 1) PERFORMANCE STANDARD 7.1: DEMONSTRATE SAFE PRACTICES AND PROCEDURES ASSOCIATED WITH THE OPERATION, MAINTENANCE AND REPAIR OF AGRICULTURAL MACHINERY AND EQUIPMENT | 72.5% |
| 3) 7.1.3 Explain the importance of preventive maintenance programs and keeping accurate maintenance records | 67.19% |
| 4) 7.1.4 Prepare an applicable piece of equipment for storage | 62.50% |
| 5) 7.1.5 Determine the cost of routine equipment maintenance | 76.56% |
| 7) 7.1.7 Perform manufacturers recommended pre-operation safety inspection | 78.12% |
| 8) CONTENT STANDARD 8.0: IDENTIFY AND DEMONSTRATE THE PROPER USE OF AGRICULTURAL HAND AND POWER TOOLS | 59.90% |
| 1) PERFORMANCE STANDARD 8.1: IDENTIFY GENERAL SHOP HAND AND POWER TOOLS | 38.54% |
| 1) 8.1.1 Identify and explain the safe and proper use of shop hand and power tools | 38.54% |
| 2) PERFORMANCE STANDARD 8.2: DEMONSTRATE APPROPRIATE PROCEDURES FOR THE MAINTENANCE AND REPAIR OF HAND TOOLS | 81.25% |
| 1) 8.2.1 Determine if the tool can be safely used in its present condition or, if damaged, reconditioned/replaced | 70.31% |
| 2) 8.2.2 Demonstrate proper care and storage of tools | 96.88% |
| 3) 8.2.3 Repair a damaged tool to a safe working condition | 76.56% |
| 9) CONTENT STANDARD 9.0: DEMONSTRATE THE OPERATION, MAINTENANCE AND USE OF ELECTRICAL POWER, MOTORS AND CONTROLS IN AGRICULTURAL APPLICATIONS | 64.38% |
| 1) PERFORMANCE STANDARD 9.1: DEMONSTRATE PROCEDURES ASSOCIATED WITH THE OPERATION, MAINTENANCE AND REPAIR OF ELECTRICAL POWER | 64.38% |
| 1) 9.1.1 Recognize possible safety hazards while working with electric motors and controls | 48.44% |
| 2) 9.1.2 Select and properly use safety equipment appropriate to working conditions | 50.00% |
| 3) 9.1.3 Explain the function of various controls used in electrical applications | 90.62% |
| 4) 9.1.4 Demonstrate a working knowledge of repair manuals and parts manuals | 64.06% |
| 5) 9.1.5 Diagnose and repair common failures relating to electrical motors and controls | 68.75% |

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| 10) CONTENT STANDARD 10.0: DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE | 56.88% |
| 1) PERFORMANCE STANDARD 10.1: ACTIVELY DEVELOP AND PARTICIPATE IN SUPERVISED AGRICULTURAL EXPERIENCE, WHICH ENABLES STUDENTS TO OBTAIN WORK-BASED SKILLS | 56.88% |
| 1) 10.1.1 Identify and describe a career interest in agriculture or agriculture related occupation | 87.50% |
| 3) 10.1.3 Keep accurate records as prescribed by the Nevada State FFA policies and procedures | 49.22% |
| 11) CONTENT STANDARD 11.0: PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA | 50.78% |
| 1) PERFORMANCE STANDARD 11.1: RECOGNIZE THE TRAITS OF EFFECTIVE LEADERS AND PARTICIPATE IN LEADERSHIP TRAINING THROUGH INVOLVEMENT IN FFA | 57.81% |
| 4) 11.1.4 Demonstrate knowledge of the FFA Code of Ethics, official dress, and the proper use of the FFA jacket | 57.81% |
| 2) PERFORMANCE STANDARD 11.2: UNDERSTAND THE OPPORTUNITIES IN FFA | 33.59% |
| 2) 11.2.2 Identify major state and national activities and awards available to FFA members | 33.59% |
| 3) PERFORMANCE STANDARD 11.3: UNDERSTAND THE IMPORTANCE OF SCHOOL AND COMMUNITY AWARENESS | 78.13% |
| 1) 11.3.1 Discuss the meaning and importance of community service | 78.12% |